

It is claimed:

1. A method for handling secure message attachments for a mobile device, comprising the steps of:

- 5                   receiving at a server a second attachment provided within a secure message;  
                    wherein the secure message itself was received by the server as a first  
attachment;  
                    requesting the second attachment at the mobile device;  
                    processing the secure message in order to locate within the secure message  
10   the second attachment; and  
                    providing the second attachment to the mobile device.

2. The method of claim 1, wherein the secure message is structured according to a security scheme such that the secure message is handled as an attachment by the server.

15                   3. The method of claim 2, wherein the security scheme includes a symmetric key scheme.

4. The method of claim 2, wherein the security scheme includes an asymmetric key scheme.

20                   5. The method of claim 2, wherein the security scheme is a Secure Multipurpose Internet Mail Extensions (S/MIME) scheme.

6. The method of claim 1, wherein the secure message is structured such that a secure layer has been added to the message and the second attachment.
- 5 7. The method of claim 6, wherein the secure layer acts as an envelope with respect to the message and the second attachment.
8. The method of claim 7, wherein the secure layer was generated during an encryption operation.
- 10 9. The method of claim 8, wherein a session key is received by the server from the mobile device for use by the server to decrypt the secure message.
- 15 10. The method of claim 7, wherein the secure layer was generated during a digital signature operation.
11. The method of claim 10, wherein the secure layer was generated during an encryption operation.
- 20 12. The method of claim 1, wherein the second attachment is selected from the group consisting of: a textual document, word processing document, audio file, image file, or video file.

13. The method of claim 1, wherein the secure message without the second attachment is sent from the server to the mobile device, wherein the second attachment is provided to the mobile device based upon the mobile device requesting the second attachment.

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14. The method of claim 13, wherein the request from the mobile device for the second attachment results from a user requesting the second attachment.

15. The method of claim 13, wherein the request from the mobile device includes data to be used by the server to identify the second attachment that is to be provided to the mobile device.

16. The method of claim 1, wherein the secure layer was generated during an encryption operation, wherein a decryption operation is performed in order to locate within the secure message the second attachment.

17. The method of claim 1, wherein the secure message has a plurality of attachments.

18. The method of claim 1, wherein the server provides an indication to the mobile device that the secure message has the second attachment, wherein the indication is used by the mobile device to indicate to the mobile device's user that the secure message has the second attachment.

19. The method of claim 1, wherein the second attachment is automatically provided by the server to the mobile device when the secure message is opened by the mobile device's user.

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20. The method of claim 1, wherein the second attachment is rendered before being provided to the mobile device.

21. The method of claim 1, wherein means for providing a wireless network and means for providing a message server are used to communicate the located attachment to the mobile device.

22. The method of claim 1, wherein the mobile device is a handheld wireless mobile communications device.

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23. The method of claim 1, wherein the mobile device is a personal digital assistant (PDA).

24. A data signal that is transmitted using a communication channel, wherein the data signal includes the second attachment of claim 1;

20        wherein the communication channel is a network, wherein the data signal is packetized data that is transmitted through a carrier wave across the network.

25. Computer-readable medium capable of causing a mobile device to perform the method of claim 1.

26. An apparatus located at a computer server for handling secure message attachments  
5 for a mobile device, wherein the server receives a secure message containing a second attachment, comprising:

a data store that stores the secure message and the second attachment;

wherein the secure message contains a secure layer such that the secure message itself is received by the server as a first attachment;

10 a secure message processing module that looks into the secure message through the secure layer in order to locate the second attachment;

wherein the second attachment is provided to the mobile device.

27. The apparatus of claim 26, further comprising:

15 a rendering module that renders the second attachment before the second attachment is provided to the mobile device.

28. The apparatus of claim 26, further comprising:

a decryption processing module to decrypt the secure message so that the  
20 second attachment can be located within the secure message.

29. An apparatus for handling secure message attachments for a mobile device,

comprising:

means for receiving a second attachment provided with a secure message;

wherein the secure message itself was received by the server as a first attachment;

5 means for processing the secure message in order to locate within the secure message the second attachment;

means for providing the second attachment to the mobile device.